Arizona Career and Technical Education Delivery System Project Report

Chapter 11

Summary and Recommendations for implementation of a career and technical education delivery system in Arizona

1. Develop, with input of all stakeholders, a shared vision and a clear and compelling mission statement. Disseminate widely and use consistently in all communications.

2. Increase the access to CTE for more students.

2.1   Determine the percentage of students served in CTE as participants, concentrators, and completers as a benchmark and set targets for enrollments in the next five years.

2.2   Review state policies for high school graduation that eliminate the general track and require all students to take a concentration, one concentration area being career technical. Consider adapting *New York's* technical endorsement or *Virginia's* CTE diploma seal. Scholarships, such as those provided in Georgia and Florida for CTE students, also increase access for students to postsecondary technical education.

3. Eliminate the mandate for the current three levels for the Arizona CTE delivery model. Replace with a set of competencies that are industry determined, reflect the national career clusters, and span grade levels into postsecondary studies.

3.1   Require a sequence of a minimum of three courses, preferably four, in a single labor market area for those students who select a career major. (See Chapter 6 for research rationale for concentrations in a career technical area).

3.2   Explore possible options for initiating and/or expanding concurrent and dual enrollment options. (See Chapter 8).

3.3   Using the curriculum development processes refined from the 2001 *Curriculum Design Process and Materials Format Project Report,* continue
the state system for developing state standards and competencies, including greater input from business and industry.

3.4   Increase district flexibility by eliminating the specifications for grade level delivery. Provide alternative models and guidelines instead. Note that several schools requested that Level I be provided at ninth grade.

3.5   There does not appear to be a comprehensive career development process at the middle school. Several states require individualized career plans required at the end of eighth grade (see *Ohio* and *Michigan* for examples).

3.6   Explore models for providing stronger transitions from middle school to high school that include a career component—e.g., Talent Development High School, the SREB Transitions project that includes competencies to be developed for success in high school, and the ninth grade "Freshman Success Academy" program from the National Academy Foundation.

3.7   Design a three-course sequence that enables students to enroll in what are now Level III courses in the tenth grade. Provide funding at the tenth grade for those students.

3.8   Use the States Career Cluster Initiative as a model for career pathway development.

3.9   Develop alternative pathways for students who wish to explore and for those who wish to prepare for careers. Refer to *Washington's* proposed model.

4. Institute a system of technical assessments for CTE.

5. Integrate CTE into the mainstream of high school education in Arizona by strengthening the academic and technical rigor of CTE curriculum and instruction. Investigate High Schools That Work (HSTW) as a whole school reform model that includes a focus on CTE.

6. Delivery structures

6.1   Explore the career academy model that uses the workplace as the organizing theme. Career academies are consistent with the tenets of high school improvement and CTE.

7. Scheduling

7.1   Investigate block-scheduling approaches to recommend to local districts to provide increased access to CTE classes.

8. Data

8.1   Arizona has a comprehensive accountability for CTE. It would be helpful to develop a compelling data message that would communicate the strengths and challenges for the state CTE system. Note: A strength of the High Schools That Work data set is that it can suggest a relationship between outcomes and process. The data are triangulated with the National Assessment of Education Progress-based test in reading, mathematics, and science; a student survey; and teacher survey. CTE field of concentration can further disaggregate the data.

8.2   Explore ways to streamline data reporting requirements, particularly the competency tracking.

9. Assessments

9.1   Provide technical assistance to local districts on alternative or authentic assessments in CTE, including portfolios, capstone or senior projects, career technical student organization skill competitions.

9.2   In addition to the technical assessments that are contained in the major recommendations for this report, suggest working with the community college system to give CTE students community college placement exams at the end of tenth grade with provisions for targeted intervention the last two years of high school. *Maryland* is currently doing this.

10. Program assessment

10.1   The current Arizona program assessment guidelines (five pillars) appear to be consistent with those of benchmarked states, *Oklahoma, Oregon, South Carolina,* and *New York*, and the National Dissemination Center exemplary programs criteria in Chapter 8. It is not clear how extensively the guidelines are being implemented and used to improve practice in Arizona.

11. State evaluation

11.1   Encourage the Governors Workforce Policy Board to undertake an employer survey to determine skill levels needed for CTE graduates and to assess the value of CTE. See the *Washington* employer survey described in Chapters 4 and 6.

12. Professional Development

12.1   Review the compelling data message and all data for gaps in student performance. With representative input from stakeholders, plan staff development directed toward improving student achievement through the use of data analysis. See Chapter 8 for discussion of staff development principles.

12.1   Survey respondents requested staff development that focuses on best practices in CTE and from other states. The National Dissemination Center Exemplary Programs project would be a good starting point. Review Chapter 9 for state best practices.

Staff development should maintain an on-going focus on integration of academic and CTE education, including problem and project based learning. The HSTW network has an extensive array of professional development opportunities in this area, including conferences, consultants, and schools to visit.

12.4   Establish a task force to address state and local leadership for CTE, including representatives from state staff, current administrators, and higher education. Review Chapter 8 for suggestions for developing CTE leaders, including state initiatives and sponsoring participation in the National Dissemination Center National Leadership Institute.